



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,809	12/12/2001	Michael C. Sanders	1662-39800 (P01-3793)	8927

22879 7590 07/28/2005

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

PHAN, TAM T

ART UNIT	PAPER NUMBER
----------	--------------

2144

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/020,809

Applicant(s)

SANDERS ET AL.

Examiner

Tam (Jenny) Phan

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,11,18,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,11,18,21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Amendment received on 06/03/2005 has been entered. Claims 1, 3-4, 11, 18, and 21-22 are currently amended. Claims 2, 8-10, 12-17, and 19-20 are cancelled.
2. Claims 1, 3-7, 11, 18, and 21-22 are presented for examination.

Priority

3. No priority claims have been made.
4. The effective filing date for the subject matter defined in the pending claims in this application is 12/12/2001.

Claim Objections

5. Claim 1 is objected to because of the following informalities: "the front network port located" should read "the front network port ~~located~~". Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-7, 11, 18, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fung (U.S. Patent Number 6,859,882) in view of Kimball (U.S. Patent Number 6,028,984).
8. Regarding claim 1, Fung disclosed a rack mount computer server (Figures 1 and 2), comprising: a central processing unit ("CPU") (Figure 1, column 6 lines 44-57); a

Art Unit: 2144

system memory coupled to the CPU (Figure 1, column 6 lines 44-57); a server management device coupled through a bus to the CPU that is configured to control server management architecture (Figure 1, column 6 lines 44-57, column 7 lines 31-47); a front network port located at a front surface of the server (column 28 lines 27-47, column 29 lines 37-46, column 30 lines 12-21); a rear network port located at a rear surface of the server (column 28 lines 27-47, column 29 lines 37-46, column 30 lines 12-21); and a switch (column 7 lines 31-47, column 10 lines 36-61); wherein a communications link is established between the server management device and a remote console through the front network port or through a rear network port (column 7 lines 31-47, column 10 lines 36-61).

9. Fung taught the invention substantially as claimed, however, Fung did not expressly teach rack mount computer server having a switch wherein said switch established said communication link between said rear network port and said server management device when no remote console is connected to said front network port, but upon connecting the remote console to said front network port, said switch automatically establishes said communications link between said front network port and said server management device.

10. Fung suggested exploration of art and/or provided a reason to modify the rack mount computer server with additional features such as a switch for automatically establish connection the appropriate device (column 28 lines 27-47, column 29 lines 37-46, column 30 lines 12-21, column 97 lines 53-65).

11. Kimball disclosed switching system wherein said switch established said communication link between said rear network port and said server management device

Art Unit: 2144

when a remote console is connected to said front network port, but upon connecting the remote console to said front network port, said switch automatically establishes said communications link between said front network port and said server management device (Abstract, Figures 1 & 3, column 1 line 60-column 2 line 7, column 3 lines 6-24, lines 46-57, column 4 lines 16-27).

12. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the rack mount computer server of Fung with the teachings of Kimball to include a switch for automatically establish connection in order to provide seamless way for a computer to automatically detect network link wellness and responsively switch to an operative network link (Kimball, column 1 lines 52-55) since the reconfiguration to access the serial port can be complicated and time consuming (Kimball, column 1 lines 41-48).

13. Regarding claim 2, Fung disclosed a server wherein access to the server management device is provided through a switch that permits access from either the front network port or the rear network port (column 28 lines 27-47, column 29 lines 37-46, column 30 lines 12-21).

14. Regarding claim 3, Fung disclosed a server wherein access to the server management device is provided through an RJ-45 receptacle located at the front and at the rear of the server (Figure 4, column 7 lines 31-47, column 29 lines 36-46, column 30 lines 12-21).

15. Regarding claim 4, Fung disclosed a server further comprising: a data port in the front of the server wherein the data port provides access to server operating system debug routines (Figures 1 and 2, column 10 lines 36-61, column 25 lines 36-49).

16. Regarding claim 5, Fung disclosed a server wherein the data port is an RS-232 serial data port (column 17 lines 27-35, column 29 lines 37-46).

17. Regarding claim 6, Fung disclosed a server wherein the front network port that provides access to the server management device and the data port that provides access to the operating system debug routines are provided by separate connectors located at the front of the server (column 10 lines 36-61, column 13 lines 26-39, column 17 lines 27-61, column 19 lines 11-31).

18. Regarding claim 7, Fung disclosed a server wherein the front network port that provides access to the server management device and the data port that provides access to the operating system debug routines are provided by an adapter that connects to a single connector located at the front of the server (Figure 9, column 10 lines 36-61, column 13 lines 26-39, column 17 lines 27-61, column 19 lines 11-31).

19. Regarding claim 8, Fung disclosed a adapter for diagnosing a rack mount server (Figures 1 and 2, column 10 lines 36-61) comprising: a first connector for accessing server management hardware within the rack mount server (Figures 1, 2, 4, and 9, column 7 lines 31-47, column 10 lines 36-61, column 19 lines 11-31); a second connector for accessing operating system debug information in the rack mount server (Figures 1, 2, 4, and 9, column 7 lines 31-47, column 10 lines 36-61, column 19 lines 11-31); a third connector for passing data between an external computer system coupled to the first or second connectors and the rack mount server (Figures 1, 2, 4, and 9, column 7 lines 31-47, column 10 lines 36-61, column 19 lines 11-31); wherein the third connector mates with a mating connector accessible from the front of the rack mount server (column 7 lines 31-47, column 10 lines 36-61, column 19 lines 11-31).

Art Unit: 2144

20. Regarding claim 9, Fung disclosed an adapter wherein the first connector is an RJ-45 connector (Figure 4, column 7 lines 31-47, column 29 lines 36-46, column 30 lines 12-21).

21. Regarding claim 10, Fung disclosed an adapter wherein the second connector is a nine-pin RS-232 serial data connector (column 17 lines 27-35, column 29 lines 37-46).

22. Regarding claim 11, Fung disclosed a method of diagnosing a rack mount server while the server is installed in a rack (Figures 1 and 2), comprising: establishing connectivity between a rear network port at the rear end of the server and a server management device (Fung, Figures 1, 4, 6, 9-10, column 7 lines 31-47); connecting an external computer to the server using a front port located on the user-accessible faceplate at the front the server (column 10 lines 36-61, column 13 lines 26-39, column 19 lines 11-31); and executing server operating system debug algorithms using the external computer (column 10 lines 36-61, column 13 lines 26-39, column 19 lines 11-31); and based on the external computer being connected to the front port, automatically disconnecting said rear network port from said server management device and re-establishing connectivity between said server management device and said front port (Kimball, Abstract, Figures 1 & 3, column 1 line 60-column 2 line 7, column 3 lines 6-24, lines 46-57, column 4 lines 16-27).

23. Regarding claim 12, Fung disclosed a method further comprising: accessing data and routines in a server management device in the server using a remote console; connecting to the server management device through a rear network port at the rear of the server or at a front network port at the front of the server (column 10 lines 36-61, column 13 lines 26-39, column 17 lines 27-61, column 19 lines 11-31).

24. Regarding claim 13, Fung disclosed a method further comprising: selectably switching to the front server management connection if an external computer is physically coupled to the front network port server (column 10 lines 36-61, column 17 lines 27-61, column 19 lines 11-31).

25. Regarding claim 14, Fung disclosed a method further comprising: accessing the debug and front network ports through an adapter connected to the front of the server (Figure 9, column 10 lines 36-61, column 13 lines 26-39, column 17 lines 27-61, column 19 lines 11-31).

26. Regarding claim 15, Fung disclosed a method further comprising: accessing the debug and network ports directly from the front of the server (column 10 lines 36-61, column 13 lines 26-39, column 17 lines 27-61, column 19 lines 11-31).

27. Regarding claim 16, Fung disclosed a method wherein the debug port is an RS-232 serial data port (column 17 lines 27-35, column 29 lines 37-46).

28. Regarding claim 17, Fung disclosed a method wherein the network port is an IP port (column 100 lines 6-14).

29. Regarding claims 18 and 21-22, the limitations of these claims are similar to the limitations of claims 1 and 4-6, and thus these claims are rejected using the same rationale.

30. Since all the limitations of the claimed invention were disclosed by Fung and Kimball, claims 1, 3-7, 11, 18, and 21-22 are rejected

31. Claims 1, 3-7, 11, 18, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Layton (U.S. Patent Number 6,483,709) in view of Gill et al. (U.S.

Art Unit: 2144

Patent Number 5,388,032), hereinafter referred to as Gill, further in view of Kimball (U.S. Patent Number 6,028,984).

32. Regarding claim 1, Layton disclosed a rack mount computer server (Abstract, Figures 5 and 8-9, column 7 lines 38-55), comprising: a central processing unit ("CPU"); a system memory coupled to the CPU; a server management device coupled through a bus to the CPU that is configured to control server management architecture (column 1 line 66-column 2 line 16, column 3 lines 26-40, column 3 line 56-column 4 line 10, column 9 lines 4-19); and a rear network port located at a rear surface of the server (Abstract, Figure 4A signs 420 and 425, column 5 lines 24-37).

33. Layton taught the invention substantially as claimed. However, Layton did not expressly teach a rack mount computer server having a front network port located at a front surface of the server; a switch; wherein a communications link is established between the server management device and a remote console through the front network port or through a rear network port; and wherein said switch established said communication link between said rear network port and said server management device when a remote console is connected to said front network port, but upon connecting the remote console to said front network port, said switch automatically establishes said communications link between said front network port and said server management device.

34. Layton suggested exploration of art and/or provided a reason to modify the rack mount computer server with additional feature such as connecting a remote console to the computer server to allow easy access (column 1-lines 25-36, column 3 lines 27-40, column 9 lines 50-59).

Art Unit: 2144

35. Gill disclosed a rack mount computer server comprising a front network port located at a front surface of the server (Figures 4 and 12, column 4 line 65-column 5 line 10, column 6 lines 26-30, column 9 lines 9-25); a switch [discriminator or rotary switch] (column 4 lines 53-column 5 line 10, column 9 line 9-25); wherein a communications link is established between the server management device and a remote console through the front network port or through a rear network port (Figures 4 and 12, column 6 lines 26-30, column 8 lines 62-column 9 line 25).

36. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the rack mount computer server of Layton with the teachings of Gill to include the front network port, the switch, and the establishing of communications link between the server management device and a remote console through a front network port or through a rear network port in order to enable users to easily and flexibly select a computer server for monitoring (Gill, column 4 lines 53-59) since the users need not access the back of the server rack to disconnect and re-connect the remote console (Gill, column 4 lines 59-64).

37. The combination of Layton and Gill taught the invention substantially as claimed, however, the combination of Layton and Gill did not expressly teach rack mount computer server having a switch wherein said switch established said communication link between said rear network port and said server management device when no remote console is connected to said front network port, but upon connecting the remote console to said front network port, said switch automatically establishes said communications link between said front network port and said server management device.

38. Gill suggested exploration of art and/or provided a reason to modify the rack mount computer server with additional features such as a switch for automatically establish connection the appropriate device (Abstract, column 4 line 53-column 5 line 10, column 28 lines 36-44).

39. Kimball disclosed switching system wherein said switch established said communication link between said rear network port and said server management device when a remote console is connected to said front network port, but upon connecting the remote console to said front network port, said switch automatically establishes said communications link between said front network port and said server management device (Abstract, Figures 1 & 3, column 1 line 60-column 2 line 7, column 3 lines 6-24, lines 46-57, column 4 lines 16-27).

40. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combined rack mount computer server of Layton and Gill with the teachings of Kimball to include a switch for automatically establish connection the appropriate device in order to enable users to easily and flexibly select a computer server for monitoring (Gill, column 4 lines 53-59) and to provide seamless way for a computer to automatically detect network link wellness and responsively switch to an operative network link (Kimball, column 1 lines 52-55) since the reconfiguration to access the serial port can be complicated and time consuming (Kimball, column 1 lines 41-48).

41. Regarding claim 3, Gill disclosed a server wherein access to the server management device is provided through a mating receptacle [an RJ-45 receptacle] located at the front and at the rear of the server (column 11 lines 11-32).

Art Unit: 2144

42. Regarding claim 4, Gill disclosed a server further comprising: a data port in the front of the server; wherein the data port provides access to server operating system debug routines (Figures 4 and 12, column 6 lines 26-30, column 9 lines 9-25).

43. Regarding claim 5, Layton disclosed a server wherein the data port is a [an RS-232] serial data port (column 3 line 56-column 4 line 10, column 7 lines 56-column 8 lines 19).

44. Regarding claim 6, Gill disclosed a server wherein the front network port that provides access to the server management device and the data port that provides access to the operating system debug routines are provided by separate connectors located at the front of the server (Figures 4 and 12, column 6 lines 26-30, column 9 lines 9-25).

45. Regarding claim 7, Gill disclosed a server wherein the front network port that provides access to the server management device and the data port that provides access to the operating system debug routines are provided by an adapter that connects to a single connector located at the front of the server (Figures 4 and 12, column 6 lines 26-30, column 9 lines 9-25).

46. Regarding claim 11, Layton, Gill, and Kimball combined disclose a method of diagnosing a rack mount server while the server is installed in a rack (Layton, Figures 8-9, column 3 lines 41-55), comprising: establishing connectivity between a rear network port at the rear end of the server and a server management device (Layton, column 1 line 66-column 2 line 16, column 3 lines 26-40, column 3 line 56-column 4 line 10, column 9 lines 4-19); connecting an external computer to the server using a front port located on the user-accessible faceplate at the front the server (Layton, Abstract,

Art Unit: 2144

column 7 lines 38-55; Gill, Figures 4 and 12); and executing server operating system debug algorithms using the external computer (Gill, Figures 4 and 12, column 6 lines 26-30, column 8 lines 62-column 9 line 25); and based on the external computer being connected to the front port, automatically disconnecting said rear network port from said server management device and re-establishing connectivity between said server management device and said front port (Kimball, Abstract, Figures 1 & 3, column 1 line 60-column 2 line 7, column 3 lines 6-24, lines 46-57, column 4 lines 16-27).

47. Regarding claims 18- and 21-22, the limitations of these claims are similar to the limitations of claims 1 and 4-6, and thus these claims are rejected using the same rationale.

48. Since all the limitations of the claimed invention were disclosed by the combination of Layton, Gill, and Kimball, claims 1, 3-7, 11, 18, and 21-22 are rejected.

Response to Arguments

49. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

50. As the rejection reads, Examiner asserts that the combination of these teachings render the claimed invention obvious.

Conclusion

51. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

52. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (571) 272-3930. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2144

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MARC D. THOMPSON
MARC THOMPSON
PRIMARY EXAMINER

Tam T. Phan
July 22, 2005

EP